



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,438	01/23/2004	Andrew M. Hatch	HSTI 0135 PUS1/H50006AHST	6831
35312 7590 04/24/2009 BROOKS KUSHMAN P.C./ HENKEL CORPORATION 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER DOUYON, LORNA M	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 04/24/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,438

Applicant(s)

HATCH ET AL.

Examiner

Lorna M. Douyon

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13, 14, 16, 17 and 80-94 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13, 14, 16, 17 and 80-94 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 17, 2009 has been entered.
2. Claims 1-10, 13-14, 16-17, 80-94 are pending. Claims 12, 15, 18-79 and 95 are cancelled. Claims 1, 14, 80, 86, and 92 are currently amended.
3. The objection to claims 1 and 80 for minor informalities is withdrawn in view of Applicants' amendment.
4. The rejection of claims 18 and 95 under 35 U.S.C. 112, second paragraph informalities is withdrawn in view of Applicants' cancellation of these claims.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-10, 13-14, 16-17, 80-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. (US Patent No. 6,214,777), hereinafter "Li".

Li teaches a lubricant composition which is used to treat or lubricate containers (see col. 1, lines 8-10), like aluminum cans (see col. 8, line 66), which comprises neutralizing agents, surfactants, water and water-conditioning agents (see col. 6, lines 41-43). Useful neutralizing agents include the alkali metal hydroxides and are present in an amount to adjust the pH of the composition to a range of about 3 to about 9.5 (see col. 6, lines 44-57). Suitable surfactants include nonionic surfactants (see col. 6, lines 59-67). Particularly suitable nonionic surfactants are the alkoxyated alcohols having the general formula $R^{10}O((CH_2)_mO)_n$ wherein R^{10} is an aliphatic group having from about 8 to about 24 carbon atoms, m is a whole number from 1 to about 5, and n is a number from 1 to about 40 which represents the average number of ethylene oxide groups on the molecule (see col. 7, lines 18-25), and can be used in an amount of about 0.5 to about 30 percent by weight of the composition (see col. 7, lines 26-30). Other surfactants include ethoxylated alkylphenols and polyoxyalkylene oxide block copolymers (see col. 7, lines 1-17). Generally, the total surfactant concentration ranges from about 1 wt% to 50 wt%, and one or more surfactants can be used (see col. 7, lines 50-53). Li, however, fails to specifically disclose a cleaning composition having an average water-break-free percent reduction of less than 50% after 7 days aging as required in claim 1; a composition comprising an ethoxylate of an alcohol having a formula wherein the linear alcohol ethoxylate has an alkyl group and ethoxy group as those recited, and another nonionic surfactant, in amounts as those recited, the water-

break-free percent reduction; and cloud point and pH of the composition as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the composition of Li to have a similar water-break-free percent reduction as those recited because similar ingredients have been utilized.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared a composition comprising a combination of nonionic surfactants in their optimum proportions wherein one contains a 40 mole ethoxy group, and another with a lower ethoxy group because it is taught by Li at col. 7, lines 52-53 that one or more surfactants may be used, and to optimize the ethylene oxide and alkyl groups of the nonionic surfactants because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to the water-break-free percent reduction and cloud point of the composition, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to reasonably expect said properties to be within those recited because similar ingredients have been utilized.

With respect to the pH of the composition, as the word "about" permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the lower pH limit of about 3 may be considered to read on pH less than 2.

7. Claims 1-5, 7-10, 13-14, 16-17, 80-85, 87-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yianakopoulos (US Patent No. 5,462,697).

Yianakopoulos teaches a cleaning composition for cleaning hard surfaces in the form of a dilute oil-in-water microemulsion which comprises about 0.1 to about 15% of a water-mixable nonionic surfactant, 1% to 10% of at least one organic acid cosurfactant, and 10% to 85% of water, said proportions being based upon the total weight of the composition (see col. 4, lines 3-23; 40-52; col. 8, lines 27-29). The nonionic surfactant includes the condensation products of a higher alcohol (e.g., an alkanol containing about 8 to 18 carbon atoms in a straight or branched chain configuration) condensed with about 5 to 30 moles of ethylene oxide (see col. 8, lines 47-51). Yianakopoulos also teaches that the acidic all purpose hard surface cleaning composition comprises approximately 0.1% to 30 wt% of at least one surfactant selected from the group consisting of nonionic surfactants and anionic surfactants (see col. 4, lines 43-45, col. 15, lines 64-67). Examples of different nonionic surfactants are disclosed in col. 8, line 27 to col. 9, line 67, and one example is ethylene oxide-propylene oxide condensates of primary alcohols. The pH of the microemulsion cleaner is usually 1-5, preferably 1-4,

and more preferably 1.5-3.5 (see col. 14, lines 60-62). Yianakopoulos, however, fails to specifically disclose (1) a cleaning composition comprising a nonionic wherein the ethoxylate of an alcohol has 12 to 80 carbon atoms and 20 to 80 mole ethoxylate, and another nonionic surfactant different from the first, as required in independent claims 1 and 80 (2) a cleaning composition having an average water-break-free percent reduction of less than 50% after 7 days aging as required in claims 1 and 81; (3) a cleaning composition which is capable of cleaning an exterior wall of an aluminum can such that the percent of total surface area of the exterior wall which supports a continuous film of water is greater than 50% after the aluminum can is cleaned with the cleaning composition as required in claims 3 and 83, (4) the cloud point of the cleaning composition as required in claim 2; (5) the ethoxylate of an alcohol having 20 carbon atoms as required in claims 10 and 90; and (6) the ethoxylate of an alcohol having a mixture of straight and branched alkyl as required in claims 7 and 87.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared an acidic cleaning composition comprising one nonionic surfactant wherein the ethoxylate group and alkyl group are within those recited, and another nonionic surfactant different from the first because Yianakopoulos teaches "at least one nonionic surfactants" and to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through

routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the composition of Yianakopoulos to exhibit a water-break-free percent reduction of less than 50% because similar components having overlapping proportions have been utilized.

With respect to difference (3), it has been held that the recitation that an element is "adapted to" perform or is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. The recitation of a new intended use for an old product does not make a claim to that old product patentable, see *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).

With respect to difference (4), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect said property to be within those recited because similar ingredients have been utilized.

With respect to difference (5), a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled

in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778F.2d 775,227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.051.

With respect to difference (6), the combination of the straight and branched chains in the nonionic surfactant of Yianakopoulos (see col. 8, lines 47-51) is likely to be obvious when it does no more than yield predictable results.

Response to Arguments

8. Applicants' arguments filed February 17, 2009 have been fully considered but they are not persuasive.

With respect to the obviousness rejection based upon Li, Applicants argue that the independent claims 1 and 80 are amended by deleting "about" from the upper limit of the ethoxylate of an alcohol having formula I, i.e., component "A" and which was indicated by the Examiner that this amendment will overcome the Li reference.

Upon careful consideration of the present amended claims, the Li reference is maintained because of the following reasons. The present claims now require (A) an ethoxylate of an alcohol having Formula I in an amount from about 0.1 to 3 g/l (about 0.01 to 0.3 wt%); (B) an inorganic pH adjusting agent such that the pH of the cleaning composition is less than 2; and (C) at least one nonionic surfactant that is different than component A in an amount from about 0.1 to about 3 g/l. The total amount of nonionic surfactants would then range from about 0.2 to about 6 g/l (equivalent to about 0.02 to about 0.6 wt%). In col. 7, lines 26-30, Li teaches about 0.5 to about 30 percent by

weight of nonionic surfactants which overlaps those recited, i.e. alkoxyated alcohols having the general formula $R^{10}O((CH_2)_mO)_n$ wherein R^{10} is an aliphatic group having from about 8 to about 24 carbon atoms, m is a whole number from 1 to about 5, and n is a number from 1 to about 40 which represents the average number of ethylene oxide groups on the molecule (see col. 7, lines 18-25). With this teaching, the combination of nonionic surfactants, say for example, having 1 and 40 ethylene oxide groups is envisaged. Also, in col. 7, lines 50-53, Li teaches that the total surfactant concentration ranges from about 1 wt% to 50 wt%, and that one or more surfactants can be used. The word "about" permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), hence, the upper limit of the total amount of nonionic surfactants of the instant claims (i.e., about 0.6 wt%) read on the "about 0.5 wt% or about 1 wt% nonionic surfactants" as discussed above.

With respect to the obviousness rejection based upon Yianakopoulos, Applicants argue that independent claims 1 and 80 are amended so that the surfactant that is different than component A is a nonionic surfactant, and that Yianakopoulos teaches "1 to 10% of at least one organic acid cosurfactant" which is ionic.

The Examiner respectfully disagrees with the above arguments because even though Yianakopoulos teaches "1 to 10% of at least one organic acid cosurfactant" which is ionic, this organic acid cosurfactant is not excluded from the "comprising" language of the instant claims. Yianakopoulos teaches in col. 4, lines 43-45, col. 15, lines 64-67, and claim 1, that the acidic all purpose hard surface cleaning composition comprises approximately 0.1% to 30 wt% of at least one surfactant selected from the

group consisting of nonionic surfactants and anionic surfactants. Hence, with this teaching, more than one nonionic surfactants may be used.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1796